From:

Smith, Monica

Sent:

Thursday, September 21, 2017 3:18 PM

To:

Mason, Steve

Subject: Attachments:

FW: DRAFT Summary Report SG War 9-1-17v1 (003) \_kn.docx

From: Ngo, Kim

Sent: Thursday, September 21, 2017 3:16 PM

To: Smith, Monica

Subject: RE: DRAFT Summary Report

Monica, I was in the field today and just returned. Here you go.

From: Smith, Monica

Sent: Thursday, September 21, 2017 1:31 PM

To: Ngo, Kim < Ngo.Kim@epa.gov > Subject: FW: DRAFT Summary Report

Can you add some language to the DW/WW entry

From: Mason, Steve

**Sent:** Thursday, September 21, 2017 1:23 PM **To:** Smith, Monica <<u>smith.monica@epa.gov</u>>

**Subject:** DRAFT Summary Report

# With Regards, Steve



# SUMMARIES OF ACTIVITIES DURING HURRICANE HARVEY EPA REGION 6

#### Introduction

On August 25, 2017, Hurricane Harvey impacted the Texas Coast as a Category 4 Hurricane. EPA Region 6 immediately activated their Regional Emergency Operations Center (REOC) and deployed personnel to immediately begin coordinating with the State of Texas on emergency response activities. In addition, FEMA requested ESF-10 support to State Emergency Operations Center (SEOC) and the FEMA Regional Response Coordination Center (RRCC). On August 28, FEMA issued a Mission Assignment to EPA Region 6, requesting ESF-10 assistance to the State of Texas in support of assessment and response operations to actual or threatened hazardous materials and oil releases/discharge.

The State of Texas requested support with field operations, to include, but not limited to: identify and assess impacts to drinking water and wastewater critical infrastructure; assist in the implementation of Response Manager tracking system; response to oil and hazardous materials discharges/releases; augment personnel for response operations; conduct aerial assessments to assess discharges/releases; and collect and dispose of accumulations of orphaned containers, and damages to oil/chemical facilities. Response Manager is used during the incident to track operations (emergency responses; water assessments; orphaned containers; as well as other information).

At the peak of the response, over 170 EPA personnel worked with State and local officials on this effort. For information on the response, EPA established a website with up-to-date information: <a href="https://response.epa.gov/Hurricaneharvey2017">https://response.epa.gov/Hurricaneharvey2017</a>. Additionally, the State of Texas (TCEQ) has a website to provide the citizens of Texas with information: <a href="https://www.tceq.texas.gov/response/hurricanes">https://www.tceq.texas.gov/response/hurricanes</a>

#### Water/Wastewater Assessments

EPA Region 6 provided 10 staff members to augment the TCEQ <u>phone bank</u> in Austin to contact water and waste water treatment facilities in the impacted areas to determine their operational status, as well as Boil Water Notices. Based on these phone contacts, several facilities were targeted for on-site visits to assess the facility's ability to conduct operations. As of September 15, 2017, phone <u>contacts were made</u> to approximately 6,750 drinking water plants and 4,600 waste water plants.

EPA Region 6 also provided 16 additional staff members to assist TCEQ with conducting on site assessments at water and wastewater systems in the Houston area. On site assessments were conducted at approximately 625 drinking water and 440 waste water treatment facilities as of September 15, 2017, when EPA operations were concluded. The results of the assessments and phone interviews were shared with the U.S. Army Corps of Engineers for their Infrastructure Work. The TCEQ will use the assessment results to provide future assistance to the impacted facilities.

As of September 15, of the 2,022 systems designated for <u>assessment and</u> follow up, EPA's collaborative work with the state ensured the return of 1,945 community water systems to fully operational status. These systems cover 99% of the population in the greater Houston area (7.23 out of 7.26 million served). The remaining system restorations and lifting of boil water notices oversight were transitioned to the TCEQ regional offices.

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## **Mobile Air Monitoring**

EPA deployed two of their TAGA mobile laboratories to assist in emergency response activities as a result of Hurricane Harvey. The Trace Atmospheric Gas Analyzer (TAGA) is self-contained and is capable of real-time sampling and of outdoor air or emissions. The TAGA lab monitored the ambient air in the vicinity of approximately 25 facilities in the impacted areas. No monitored readings exceeded the TCEQ Air Monitoring Comparison Values short-term screening levels.

### **Orphaned Containers**

At the conclusion of each hurricane in Region 6, there is always orphaned containers which result of the surge or flooding conditions, usually ending up in or around waterways. EPA, in coordination with TCEQ, TGLO, and the U.S. Coast Guard, established three branches to assess, collect, characterize, and dispose of orphan containers in the impacted areas. Several reconnaissance/assessment teams identified targets from aerial and ground reconnaissance. Approximately 1,000 containers, including drums, cylinders, smaller containers, totes, and even above ground storage tanks (ASTs) were assessed and transported to waste pads. Once there, the contents are characterized, bulked, and shipped off for ultimate disposal.

#### **Emergency Responses**

EPA Region 6, as well as TCEQ, received over 200 reports of releases/spills of hazardous materials and oil throughout the impacted areas. EPA responded to approximately 35 of the releases to assess the extent of the release, impact to human health and the environment, and to ensure the release was being properly addressed by the responsible party. One such was response was to the Arkema facility in Crosby, Texas, to support the response activities of the Crosby Volunteer Fire Department and the Harris County Fire Marshal's Office during event and resulting evacuation of the surrounding community. EPA collected downstream surface water runoff samples at four locations outside the evacuation zone, near residential areas, the results being less than the screening levels that would warrant further investigation. EPA also flew the ASPECT aircraft to test resulting smoke from the fires at Arkema. ASPECT found no exceedances of the Texas comparison values. The EPA On-Scene Coordinator participated in the Unified Command during the response.